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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,288	11/18/2003	Sathish Kumar	15141US02	6074
23446 7590 10/16/2007 MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661			EXAMINER AN, SHAWN S	
			ART UNIT 2621	PAPER NUMBER
			MAIL DATE 10/16/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/716,288	KUMAR ET AL.	
	Examiner	Art Unit	
	Shawn S. An	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-14 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. The claimed invention is directed to non-statutory subject matter.

Claims 1 and 4 comprise non-statutory subject matter.

The following are examples of acceptable language in overcoming non-statutory subject matter:

A. the recited "an instruction memory for storing a plurality of executable instructions" should be changed to "a computer readable medium storing a computer executable instructions"; and

B. the recited "a processor for executing the plurality of executable instructions, the execution of the plurality of executable instructions causing:" should be changed to "a processor for executing the computer executable instructions, the execution of the computer executable instructions causing:"

Note: the merits of claims 1 and 4 will be examined.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claim 13** recites the limitation "wherein execution of the plurality of instructions further causes:" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 8-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Inoue (5,920,352).

Regarding claims 8-9 and 11, Inoue discloses a method for decoding video data, said method comprising:

storing a portion (macroblock) of a first frame in a first one or more rows of memory (Figs. 4B and 6), and storing a portion (macroblock) of a second frame in a second one or more rows of memory (Figs. 4B and 6)(col. 9, lines 7-67; col. 10, lines 1-5); and

a particular one of the first one or more rows of memory being adjacent to a particular one of the second one or more rows of memory (Figs. 4B and 6).

Regarding claim 10, Inoue discloses the portion of the first frame being in a top half of the first frame, and the portion of the second frame being in a top half of the second frame (Figs. 4B and 6).

Regarding claim 12, Inoue discloses first one or more rows of memory are contiguous, and wherein the second one or more rows of memory are contiguous (Fig. 4B; A0 to A1 to B0 to B1 to C0 to C1).

Regarding claim 13, Inoue discloses storing a first macroblock row of a third frame in a third one or more rows of memory (C0); and a particular one of the third one or more rows of memory being adjacent to another particular one of the second one or more rows of memory (B1)(Fig. 4B).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue (5,920,352) in view of Kadono (6,836,273 B1).

Regarding claims 1-2 and 4, all of the claimed subject matter have been met by Inoue as discussed above with respect to claims 8-9 and 11 with the exception of an instruction memory for storing..., and a processor for executing

However, Kadono teaches image decoding method and providing memory management program storage medium which can increase the efficiency of the memory bank and greatly reduce the risk of erasure of the frame data for decoding (col. 6, lines 28-45).

Kadono also teaches a diagram for explaining a storage medium which contains program for implementing the memory management method and image decoding method by a computer system (Figs. 14a-14c).

Therefore, it would have been considered obvious to one of skill in the art employing Inoue's method for decoding video data to incorporate Kadono's teachings as above so that the instruction memory (a computer readable medium) stores computer executable instructions, and the processor executes the computer executable instructions, wherein the execution of the computer executable instructions performs Inoue's method for decoding video data as discussed above, thereby increasing the efficiency of the memory bank and greatly reducing the risk of erasure of the frame data for decoding.

Regarding claim 3, Inoue discloses the portion of the first frame being in a top half of the first frame, and wherein the portion of the second frame being in a top half of the second frame (Figs. 4B and 6).

Regarding claim 5, Inoue discloses first one or more rows of memory are contiguous, and wherein the second one or more rows of memory are contiguous (Fig. 4B; A0 to A1 to B0 to B1 to C0 to C1).

Regarding claim 6, Inoue discloses storing a first macroblock row of a third frame in a third one or more rows of memory (C0); and a particular one of the third one or more rows of memory being adjacent to another particular one of the second one or more rows of memory (B1)(Fig. 4B).

Allowable Subject Matter

9. Claims 7 and (14 (contingent upon overcoming 112 rejection for claim 13)) is objected to as being dependent upon rejected base claims 4 and 11, respectively, but would be allowable:

if claim 7 is rewritten in independent form including all of the limitations of the base claim 4 and any intervening claims; and

if claim 14 is rewritten in independent form including all of the limitations of the base claim 11 and any intervening claims.

Dependent claims 7 and 14 recite novel features comprising
storing a second macroblock row of the first frame in a fourth one or more rows of memory;

the third one or more rows of memory being continuous; and

wherein a particular one of the fourth one or more rows is adjacent to another particular one of the third one or more rows of memory.

The prior art of record fails to anticipate or make obvious the novel features.

Accordingly, if the amendments are made to the claims listed above, and if rejected claims are canceled, the application would be placed in condition for allowance.

Conclusion

10. The prior art made of record is considered pertinent to Applicant's disclosure.
A) Sita et al (6,301,299 B1), Memory Controller for an ATSC video decoder.
11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to *Shawn S. An* whose telephone number is 571-272-7324.
12. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SHAWN AN
PRIMARY EXAMINER

10/11/07